CLAIMS:

1. An image processing system comprising a gamma correction circuit for supplying an output value (Y) in response to an input value (X) in accordance with a gamma correction function (F): Y = F(X), which gamma correction circuit comprises:

- an input section (INP) for deriving a table input value (XT) and an interpolator input value (XI) from the input value (X);
- a table (TBL) for supplying a table value (YT) in response to the table input value (XT);
- an interpolator (INT) for supplying an interpolation value (YI) in response to the interpolator input value (YI); and
- an output section (OUT) for combining the table value (YT) and the interpolation value (YI) so as to obtain the output value (Y),

characterized in that the input section (INP) of the device comprises:

- an interval detector (DET) which defines a plurality of input value intervals (I1, I2), for supplying an interval indication (IND) which indicates the interval (I1, I2) in which the input value (X) lies;
- an input value former (IVC) for forming the table input value (XT) and the interpolator input value (XI) as a function of the interval indication (IND), the table input value (XT) and the interpolator input value (XI) being determined, respectively, by a more significant part (MSP) of the input value and the complementary less significant part (LSP) of variable magnitudes in accordance with the interval indication (IND).

2. A method of supplying an output value (Y) in response to an input value (X) in accordance with a given function (F): Y = F(X), which method comprises the following steps:

- deriving a table input value (XT) and an interpolator input value (XI) from the input value (X);
- effecting a look-up operation in a table (TBL) on the basis of the table input value (XT) in order to obtain a table value (YT);

- carrying out an interpolation (INT) on the basis of the interpolator input value (YI) in order to obtain an interpolation value (YI); and
- combining (OUT) the table value (YT) and the interpolation value (YI) in order to obtain the output value (Y),

characterized in that the method comprises the following steps:

- detecting (DET) among a plurality of input value intervals (I1, I2) the interval (I1, I2) in which the input value (X) lies;
- forming (IVC) the table input value (XT) and the interpolator input value (XI) as a function of the interval (I1,I2) in which the input value (X) lies, the table input value (XT) and the interpolator input value (XI) being determined, respectively, by a more significant part (MSP) of the input value and the complementary less significant part (LSP) of variable magnitudes in accordance with the interval (I1,I2) in which the input value (X) lies.

3. A device for supplying an output value (Y) in response to an input value (X) in accordance with a given function (F): Y = F(X), which device comprises:

- an input section (INP) for deriving a table input value (XT) and an interpolator input value (XI) from the input value (X);
- a table (TBL) for supplying a table value (YT) in response to the table input value (XT);
- an interpolator (INT) for supplying an interpolation value (YI) in response to the interpolator input value (YI); and
- an output section (OUT) for combining the table value (YT) and the interpolation value (YI) so as to obtain the output value (Y),

characterized in that the input section (INP) of the device comprises:

- an interval detector (DET) which defines a plurality of input value intervals (I1, I2), for supplying an interval indication (IND) which indicates the interval (I1, I2) in which the input value (X) lies;
- an input value former (IVC) for forming the table input value (XT) and the interpolator input value (XI) as a function of the interval indication (IND), the table input value (XT) and the interpolator input value (XI) being determined, respectively, by a more significant part (MSP) of the input value and the complementary less significant part (LSP) of variable magnitudes in accordance with the interval indication (IND).